

Spectra-Glaze®

Reg. U. S. Pat. Off., Canada, Other Foreign Countries by THE BURNS & RUSSELL CO.

GLAZED STRUCTURAL MASONRY UNITS

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SPECTRA-GLAZE® is the trade name of glazed structural concrete masonry units in modular sizes. The glazing operation is separate from the production of the block and is performed after the block have been manufactured to meet ASTM standards or better.

The glazing material is a combination of thermo-setting resinous binder and glass silica sand with pigments or colored granules to supply color.

The glazed facing is cast (not sprayed) onto each block as a semi-liquid in individual molds to assure straight edges and a smooth uniform surface regardless of the irregularities in the block. As the result of this operation the glazing material runs deep into the pores of the block.

When the glaze is then set by heat treatment, the facing becomes an integral part of the unit and cannot be removed.

See following pages for information on colors and the complete range of SPECTRA-GLAZE® sizes and shapes.

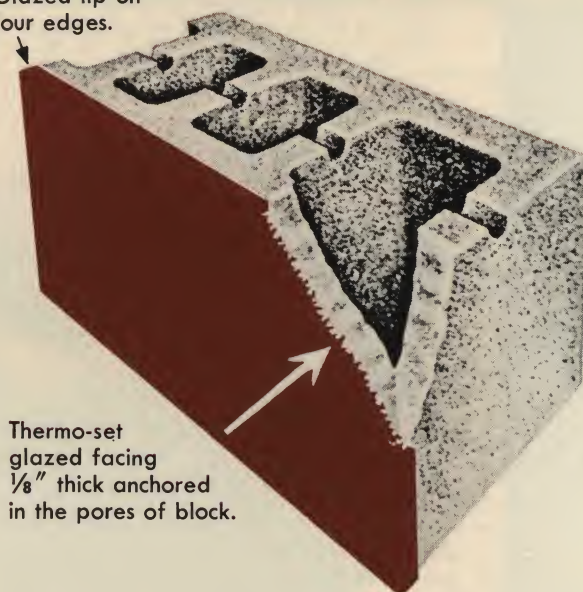
advantages

1. Loadbearing thickness eliminates expense of back-up wall.
2. Plain block on reverse side of glaze to match surrounding block walls.
3. Low face distortion tolerances greatly reduce laying cost. For the first time, SPECTRA-GLAZE® permits a smooth plumb wall with 8" x 16" glazed masonry units.
4. Permanent Colors, chemical and stain resistance result in low maintenance expense, permanent pleasing appearance.
5. Complete Range of thicknesses, from 2" to 12" allows design flexibility and eliminates walls of multi-unit thickness.
6. Quick Delivery—on change orders or forgotten shapes.
7. Neat Mortar Joints . . . $\frac{1}{16}$ " lip around face gives $\frac{1}{4}$ " exposed joint in 8" coursing.
8. Simplified line of shapes to meet standard construction requirements.
9. Straight and true edges create uniform neat appearance, especially in stack bond.
10. Lightweight block reduces laying costs and structural design requirements.
11. Satin Finish eliminates glare and reflection.
12. "Built-In" ductility in facing prevents usual crazing and hairline checking.
13. Job-site delivery results in low breakage.
14. Packaging in individual cartons eliminates breakage, marred faces and chipped edges.

manufacturers' standards

1. BASE BLOCK: Concrete units to be glazed shall be top grade units conforming with the latest revision of ASTM Specifications for Concrete Masonry Units.
2. TOLERANCES OF FACING:
 - a. Permissible Variations in Face Dimensions from Standard Dimensions: $\pm \frac{1}{16}$ ".
 - b. Permissible Variations in Bed Depth Dimensions from Standard Dimensions: $\pm \frac{1}{16}$ ".
 - c. Maximum Permissible Face Distortion: $\pm \frac{1}{8}$ ".
3. COLOR: as with any manufactured item, a minor variation in shade or color is to be expected. SPECTRA-GLAZE® has reduced this to a minimum. The color of the surface shall conform to an approved sample consisting of five stretcher units fully representing the range of shade and color.
4. QUALITY: The glazed surface shall be free from chips, cracks, pinholes, and other imperfections detracting from the appearance of the finished wall when viewed at a distance of 5 feet.

Glazed lip on four edges.



Thermo-set glazed facing $\frac{1}{8}$ " thick anchored in the pores of block.

Cut-away of SPECTRA-GLAZE® masonry unit showing thickness and embedment of glazing material into concrete block.

architect's specifications

1. BLOCK: The concrete block for SPECTRA-GLAZE® units shall conform to latest revision A.S.T.M. Specifications for Concrete Masonry Units.
2. GLAZING: Glaze units with SPECTRA-GLAZE® COMPOUND Type B, of The Burns & Russell Company of Baltimore, Maryland, applied in accordance with their instructions.
3. SIZE: Except as otherwise noted, units shall be nominal 8" x 16" face size.
4. PACKAGING: Individually carton units for shipping.
5. STORAGE: Carefully stack units prior to use. Properly protect them from weather by cover, tarpaulin, or inside storage.
6. HANDLING: Handle units with reasonable and proper care. In no case dump units from hand-truck or wheelbarrow. During erection use proper care to prevent marring or damaging face, edges, corners of units.
7. WORKMANSHIP: SPECTRA-GLAZE® is a finished material and shall be laid accordingly. Expose no chipped, cracked, broken, or otherwise defective material in finished walls unless otherwise directed.
8. CLEANING: Clean excess mortar from face of units with solution of muriatic acid and water, in concentration not to exceed 5 per cent, using a fibre brush. Immediately wash off cleaning solution with clean water.

NOTE: Architect should also specify

- a. Mortar color and mix
- b. Joint type and size
- c. Color of SPECTRA-GLAZE® units
- d. Coursing pattern
- e. Reinforcement if required
- f. Anchors and ties
- g. General workmanship

tests

see page 7 for results and guarantee

3 groups of colors available

All colors are supplied in satin finish only
consult nearest licensee for complete color cards

standard group



HUNTER GREEN

Standard group . . . comprises solid colors



AQUA GREEN



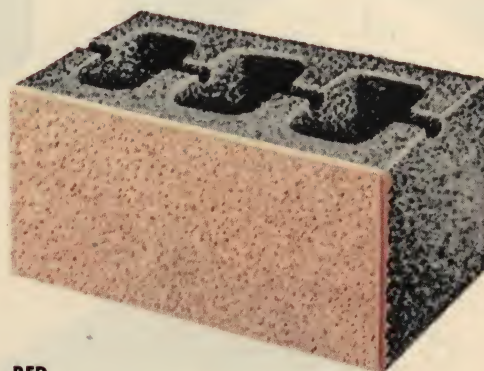
LIGHT ROSE



DUSKY RED

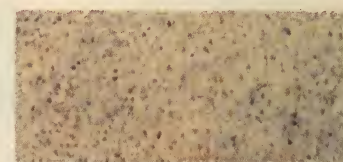
Colors shown do not represent complete line. Consult your nearest licensee for complete color cards.

custom group

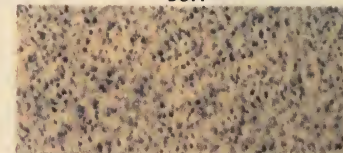


RED

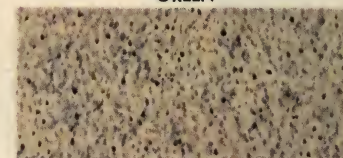
Custom group . . . colored speckles* against white background



BUFF



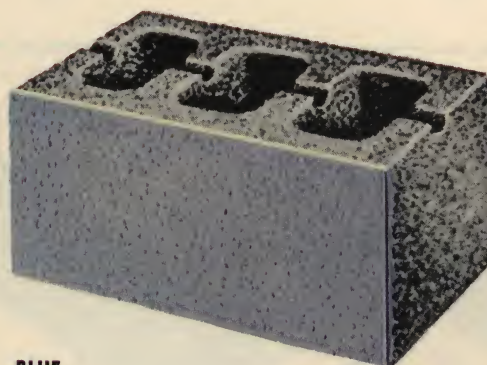
GREEN



BUFF BLACK

Colors shown are not exact matches, but as close as printing inks will allow.

decorative group



BLUE

Decorative group . . . colored speckles* against colored background



YELLOW



GREEN



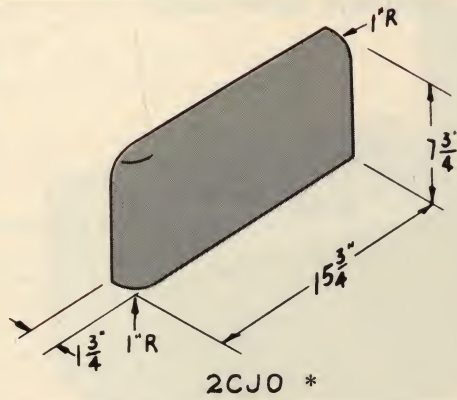
PEACH

*Speckles are small size ceramic coated chips

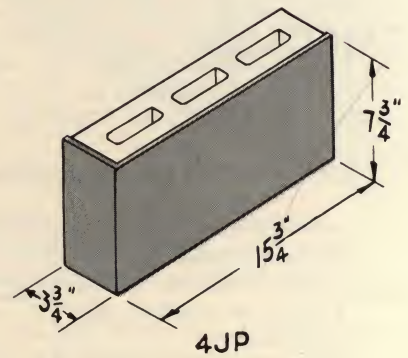
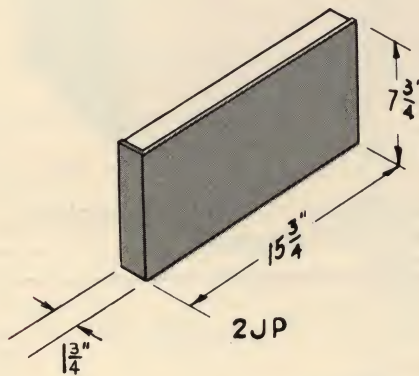
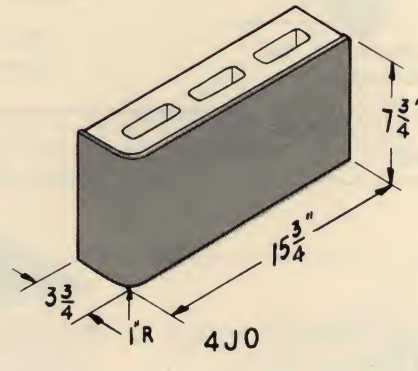
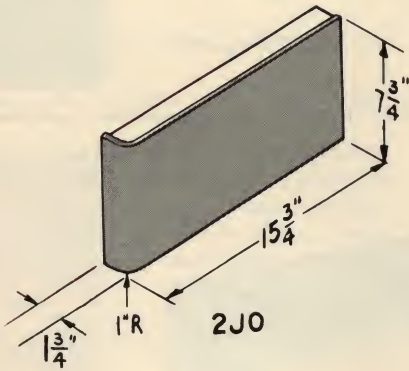
STANDARD SHAPES and DIMENSIONS

JAMB

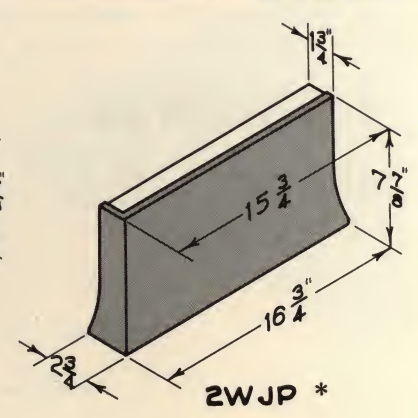
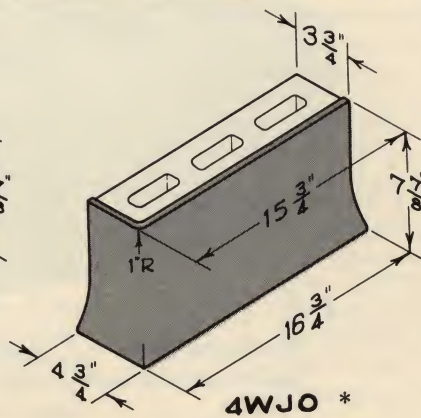
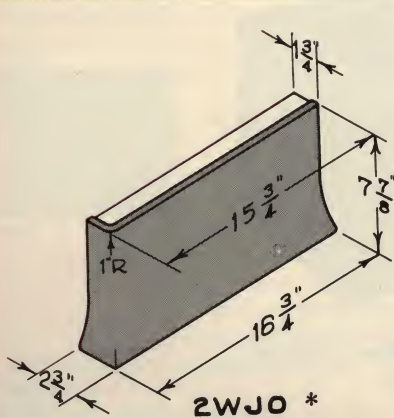
CAP



FIELD

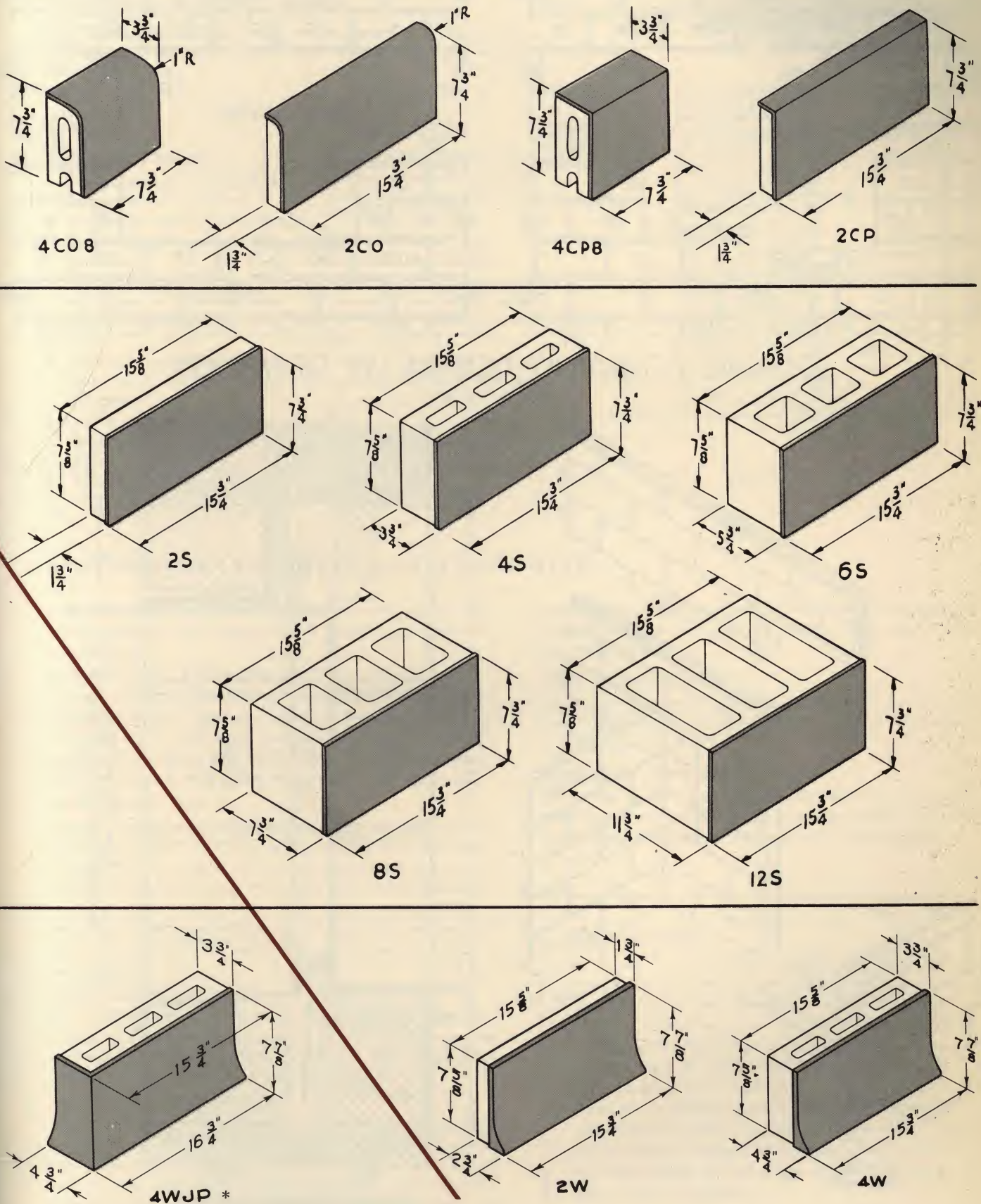


BASE

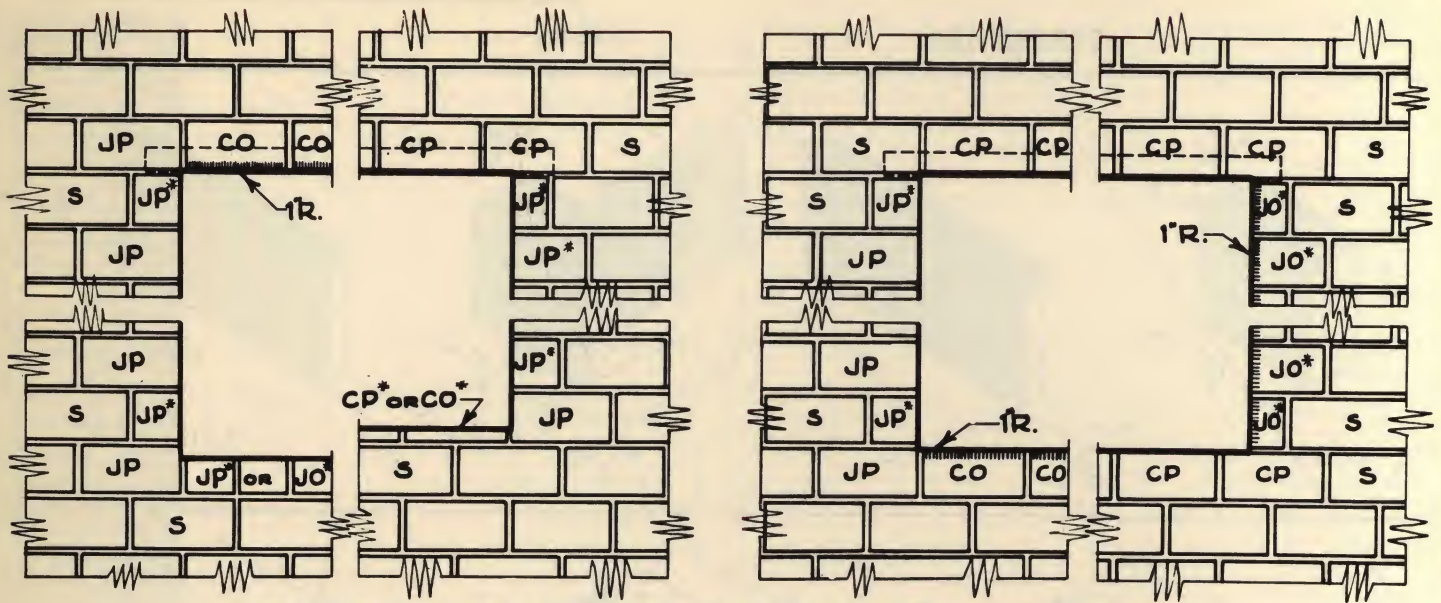


* SPECIFY RIGHT OR LEFT

STRETCHER

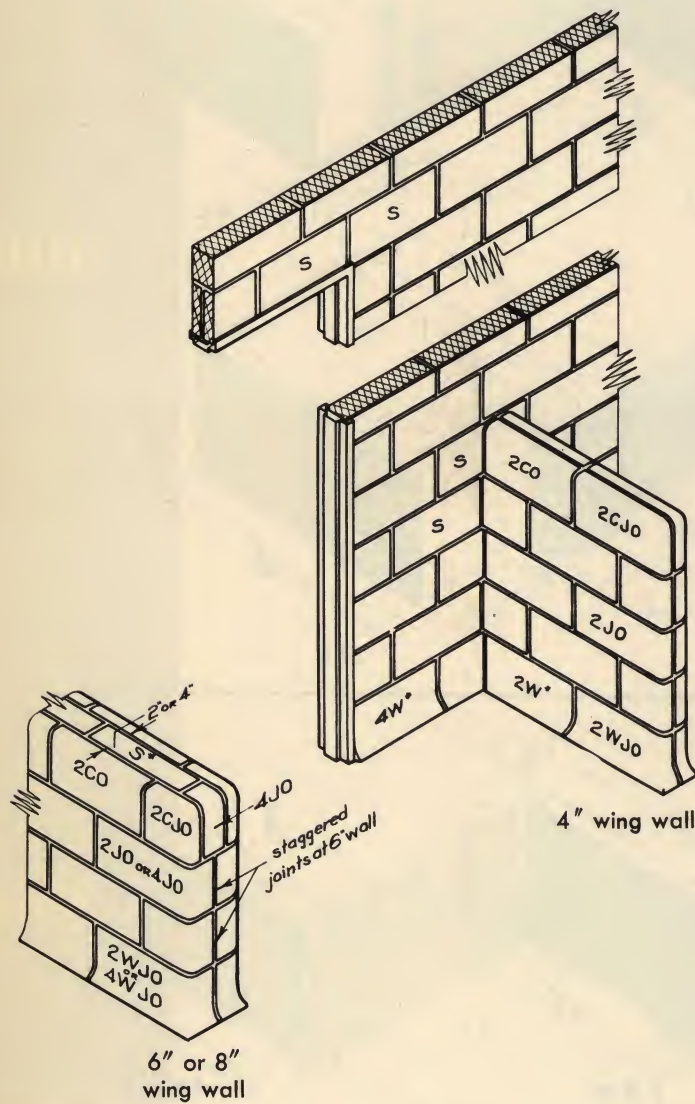


CONSTRUCTION DETAILS—SPECTRA-GLAZE® UNITS

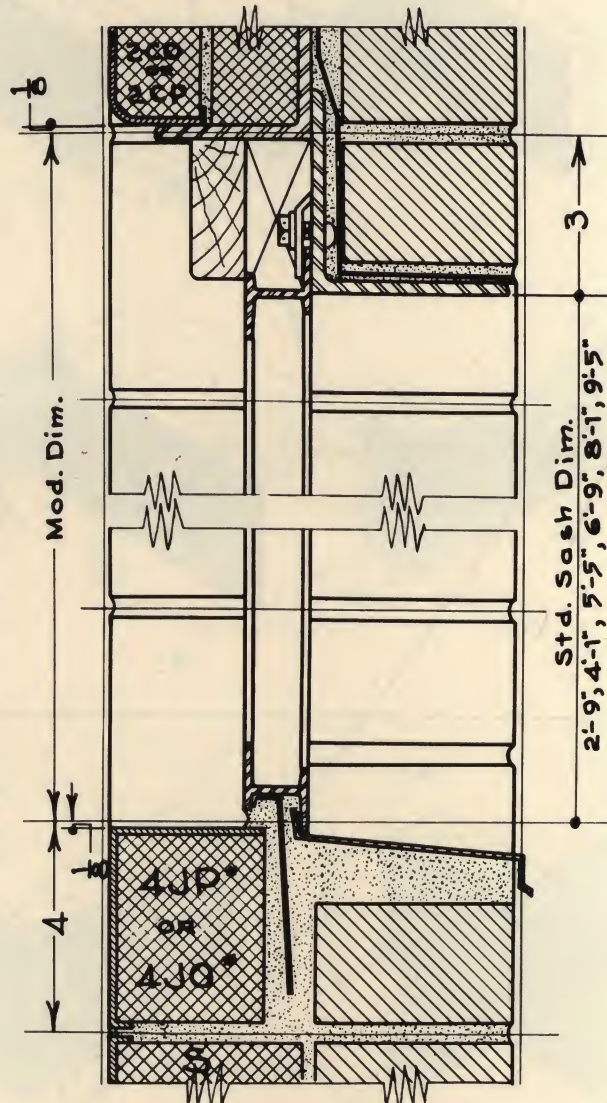


TYPICAL COURSING DETAILS AT OPENINGS

scale $\frac{3}{8}'' = 1'-0''$



6" or 8"
wing wall



TYPICAL WINDOW SECTION

scale $\frac{1}{4}'' = 1'-0''$

* UNIT CUT ON JOB

SPECTRA-GLAZE® BASE

The SPECTRA-GLAZE® base unit is designed to provide a modularly dimensioned sanitary base unit which can be installed without a floor recess.

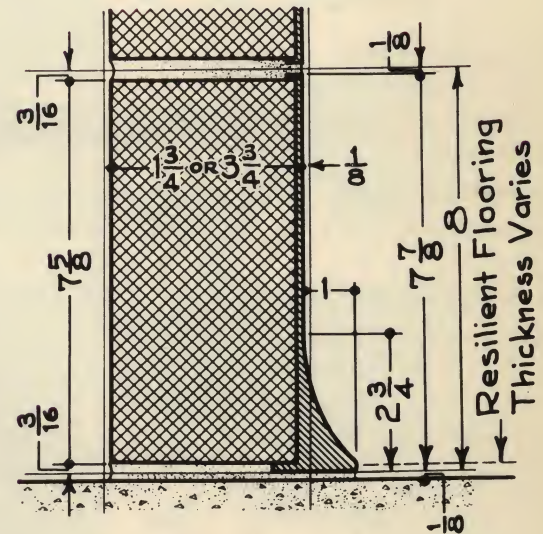
ADVANTAGES**ELIMINATES RECESS**

1. Slab installation simplified—unbroken flat surface.
2. Form work simplified—eliminates costly form work for recesses.
3. Slab finishing simplified—No forms to interfere with rapid screening and troweling.
4. Terrazzo work simplified—Base unit installed after grinding.
5. Partition layout simplified—layout made on surface of installed slab.
6. Alteration work simplified—

Base unit installed anywhere without recessing existing slab. Can be removed without costly patching.

PERMITS USE OF ALL FLOORING MATERIAL

1. Base unit is installed over terrazzo, quarry tile, ceramic tile, or plain concrete slab.
2. "Toe" is designed to receive all standard thickness of resilient flooring up to $\frac{5}{16}$ ".
3. Resilient flooring can be removed or changed as desired.

NEW SPECTRA-GLAZE® BASE

scale 3" = 1'-0"

SPECTRA-GLAZE® TESTS and GUARANTEE

These conclusions are excerpts from tests by recognized testing laboratories. Full copies of test reports are available upon request.

COMPRESSIVE STRENGTH TEST

During loading no cracking or excessive stressing of the SPECTRA-GLAZE® face was noted. At the point of failure (113,180 lb.) . . . the bond between the SPECTRA-GLAZE® facing and the block was undisturbed over approximately 90% of its area. The failing stress was 1998 lb./sq. in.

FACE SHEAR TEST

During loading no cracking or excessive stressing of the SPECTRA-GLAZE® face was noted. At the point of failure (35,000 lb.) the entire load was being supported by the SPECTRA-GLAZE® facing. At failure, this facing separated from the block, taking along with it approximately 80% of the body of the block, proper to a depth of about one-half inch. At this point the remainder of the block failed in compression.

CHEMICAL RESISTANCE

The conditions of test described were somewhat extreme. Basing our opinion on the results of the tests made, the coatings appear to be unusually resistant to the action of acids, alkalis, solvents, and oxidizing agents.

ABSORPTION COEFFICIENT

The results obtained for the first and second test periods indicated that the percentage of moisture absorbed was so low as to be negligible. Following completion of the four test periods, the total moisture absorbed was found to average only 0.0014% by weight. Basing our opinion on the test results described, the SPECTRA-GLAZE® coatings

exhibit an extremely low rate of absorption and would be considered as having a correspondingly low rate of moisture transmission.

SPOT RESISTANCE

Basing our opinion on the results obtained by the tests described above, SPECTRA-GLAZE® coatings are resistant to spotting or staining.

ABRASION RESISTANCE

The results indicate that SPECTRA-GLAZE® coatings exhibit unusually good resistance to abrasion, being generally comparable to hard burned clay tile in this respect.

GUARANTEE

If it can be established within one year that any material does not conform to the standards and tolerances listed herein, the manufacturer will replace defective units. The total measure of responsibility after units have been installed will be the supplying of replacement units to the site without charge, but no charge for reinstallation or damage occasioned thereby will be allowed. The manufacturer neither assumes nor authorizes any other person to assume for him any other liability. No replacement will be made of units chipped on job or after installation.

Spectra-Glaze® — GLAZED STRUCTURAL MASONRY UNITS

A partial list of SPECTRA-GLAZE® users

Burroughs Corporation
Paoli, Pennsylvania
Architect—Walker-Yeomans
Associates Inc.

Erie Brewing Company
Erie, Pennsylvania
Architect—owner

Girls' Welfare Home
Albuquerque, New Mexico
Architect—W. W. Boehning

Greyhound Bus Terminal
Jacksonville, Florida
Architect—W. Kenyon Drake & Assoc.

Ingham County Chest Hospital
Lansing, Michigan
Architect—Manson-Carver

Monsanto Chemical Company
St. Louis, Missouri
Architect—Holabird & Root & Burgee

Owens-Corning Fiberglas Corp.
Atlanta, Georgia
Architect—Robert & Company

Park Plaza Hotel
Toronto, Ontario
Architect—Page & Steele

Pepsi-Cola Bottling Plant
Patchogue, Long Island, N.Y.
Architect—Degenhardt, Miller &
Lindberg

Police and Fire Building
North Adams, Massachusetts
Architect—Arthur F. Eldridge



A typical SPECTRA-GLAZE® installation

Phillip Morris Company
Richmond, Virginia
Architect—Wigton-Abbott Corp.
New York City

Public School No. 19
New York City
Architect—Michael L. Radoslovich

Raskin Packing Company
Sioux City, Iowa
Architect—John Troy

Riverview Gardens School
St. Louis, Missouri
Architect—Hellmuth, Obata &
Cassabaum
Associate Architect—Walter Manske

Southern Dairies Incorporated
Charlotte, North Carolina
Architect—owner

F. W. Woolworth Company
Atlanta, Georgia
Architect—owner

manufacturing licensees

Alton Brick Company
3832 West Pine Boulevard
St. Louis 8, Missouri

Nolan Browne Company
P.O. Box 575
Dallas 21, Texas

Concrete Pipe & Products Co., Inc.
P.O. Box 1223
Richmond 9, Virginia

A. Duchini Company
24th & Brandes Streets
Erie, Pennsylvania

Glazed Block Corporation
147-5th Street
Rochelle Park, New Jersey

Glazed Products Incorporated
4500 Aurelius Road
Lansing, Michigan

**Holloway Concrete
Products Co., Inc.**
P.O. Box 1347
Winter Park, Florida

Edgar D. Otto & Son, Inc.
P.O. Box 387
Albuquerque, New Mexico

Structural Glazed Masonry, Inc.
1215 E. 73rd Street
Chicago 19, Illinois

**Tidewater Concrete
Block & Pipe Company**
P.O. Box 162
Charleston E, South Carolina

Western Brick & Supply Company
P.O. Box 1546
Lincoln 1, Nebraska

For further information consult nearest licensee or
THE BURNS & RUSSELL CO. Bayard and Severn Sts., Balto. 30, Md.
Licenseors of the SPECTRA-GLAZE® Process

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